

# REGION 6 1445 ROSS AVENUE DALLAS, TEXAS 75202-2733

NPDES Permit No NM0030996

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Lee Ranch Coal Company El Segundo Mine P.O. Box 757 Grants, NM 87020

is authorized to discharge from a facility located 35 miles north of Milan, in Grants, McKinley County, New Mexico. The discharges from multiple outfalls will be to receiving waters named Kim-me-ni-oli Valley Tributary, thence into Chaco River, a tributary of San Juan River in Segment No. 20.6.4.97 of the San Juan River Basin.

The discharges are in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II, and Part III hereof.

This is a first-time issued permit.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Issued on Prepared by

Miguel I. Flores Isaac Chen
Director Environmental Engineer

Water Quality Protection Division (6WQ) Permits & Technical Section (6WQ-PP)

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# PART I – REQUIREMENTS FOR NPDES PERMITS

# SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

The discharges are located at the following coordinates:

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Outfall No.	Latitude	Longitude
001	35°39'02.02"	107°51'22.65"
002	35°38'28.46"	107°50'19.11"
003	35°39'08.37"	107°51'53.32"
004	35°39'06.06"	107°51'58.08"
005	35°38'47.44"	107°52'27.50"
006	35°38'57.61"	107°52'27.50"
007	35°38'25.87"	107°50'44.93"
008	35°38'35.86"	107°38'35.86"
009	35°38'29.58"	107°51'19.92"
010	35°38'33.09"	107°51'17.77"
011	35°38'50.27"	107°51'13.36"
012	35°38'50.73"	107°51'17.55"
013	35°39'44.69"	107°52'05.32"
014	35°39'47.57"	107°52'31.75"
015	35°39'57.04"	107°52'22.27"
016	35°40'00.32"	107°52'55.30"
017	35°40'00.18"	107°53'09.12"
018	35°38'52.74"	107°51'34.11"
019	35°39'23.43"	107°51'44.87"
020	35°41'45.82"	107°55'03.03"
021	35°41'44.48"	107°54'36.72"
022	35°40'02.48"	107°52'24.14"
023	35°40'03.58"	107°53'32.60"
024	35°40'05.61"	107°53'47.06"
025	35°40'03.87"	107°54'20.23"
026	35°40'07.57"	107°54'38.62"
027	35°40'42.21"	107°54'24.03"
028	35°40'36.00"	107°54'50.06"
029	35°40'42.23"	107°54'46.87"

# 1. Outfalls Associated with Coal Preparation Areas

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge process water from sediment ponds in coal preparation areas. Such discharges shall be limited and monitored by the permittee as specified below and be monitored for additional pollutants as specified as section B. of this part:

		DISCHARGE LIMITATIONS			
EFFLUENT		Standard Units			
CHARACTERIST	ICS			MONITORING REC	QUIREMENTS
	STORET			MEASUREMENT	SAMPLE
POLLUTANT	CODE	MINIMUM	MAXIMUM	FREQUENCY	TYPE
pН	00400	6	9	1/Day	Grab

EFFLUENT	LUENT DISCHARGE		E	MONITORIN	G &
CHARACTERISTICS		LIMITATIONS		REPORTING	
		ug/l, UNLESS NOTED		REQUIREME	NTS
Pollutant	Storet	Monthly	Daily Max	Measurement	Sample Type
	Code	Avg	-	Frequency	
Flow	50050	Report MGD	Report MGD	1/Day	Estimate *1
Total Suspended Solids *2	00530	35 mg/l	70 mg/l	1/Day	Grab
Total Iron *2	01045	3.5 mg/l	7.0 mg/l	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY				
TESTING	30-DAY	48-HR	MEASUREMENT	
(48-Hour Static Renewal)	AVG	MINIMUM	FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	Once/Year *3	Grab

#### Footnotes:

- \*1 "Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.
- \*2 If a discharge is caused by precipitation within any 24 hour period less than or equal to the 10-year, 24-hour precipitation event, the discharge may comply with 0.5 ml/l settleable solids instead of TSS and Iron.
- \*3 When the first discharge occurs in each calendar year. If a storm event causes discharges at more than one outfall, a representative sample from coal preparation area may be used for WET testing.

# 2. Outfalls Associated with Mine Drainage in Active Mining Areas

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge mine drainage in active mining areas. Such discharges shall be limited and monitored by the permittee as specified below and be monitored for additional pollutants as specified as section B. of this part:

		DISCHARGE LIMITATIONS			
EFFLUENT		Standard Units			
CHARACTERISTIC	S			MONITORING REQUIREMENT	
	STORET			MEASUREMENT	SAMPLE
POLLUTANT	CODE	MINIMUM	MAXIMUM	FREQUENCY	TYPE
pН	00400	6	9	1/Day	Grab

EFFLUENT		DISCHARGE		MONITORING &	
CHARACTERISTICS		LIMITATIONS		REPORTING	
		ug/l, UNLESS NOTED		REQUIREME	NTS
Pollutant	Storet	Monthly	Daily Max	Measurement	Sample Type
	Code	Avg	-	Frequency	
Flow	50050	Report MGD	Report MGD	1/Day	Estimate *1
Total Suspended Solids *2	00530	35 mg/l	70 mg/l	1/Day	Grab
Total Iron *2	01045	3.0 mg/l	6.0 mg/l	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING	30-DAY	48-HR	MEASUREMENT	
(48-Hour Static Renewal)	AVG	MINIMUM	FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	Once/Year *3	Grab

#### Footnotes:

- \*1 "Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.
- \*2 If a discharge is caused by precipitation within any 24 hour period less than or equal to the 10-year, 24-hour precipitation event, the discharge may comply with 0.5 ml/l settleable solids instead of TSS and Iron.
- \*3 When the first discharge occurs in each calendar year. If a storm event causes discharges at more than one outfall, a representative sample from the most disturbed area may be used for WET testing.

#### 3. Outfall 018

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated sanitary waste. Such discharges shall be limited and monitored by the permittee as specified below:

		DISCHARGE LIMITATIONS				
EFFLUENT		Standard Units				
CHARACTERISTICS	S			MONITORING REQUIR		QUIREMENTS
	STORET			MEASUREMENT	SAMPLE	
POLLUTANT	CODE	MINIMUM	MAXIMUM	FREQUENCY	TYPE	
PH	00400	6	9	1/Day	Grab	

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS Ug/l, UNLESS NOTED		MONITORING & REPORTING REQUIREMENTS	
Pollutant	Storet Code	Monthly Avg	Daily Max	Measurement Frequency	Sample Type
Flow	50050	Report MGD	Report MGD	1/Day	Estimate *1
Biochemical Oxygen Demand, 5-day	00310	30 mg/l	45 mg/l	1/Day	Grab
Total Suspended Solids	00530	30 mg/l	45 mg/l	1/Day	Grab
E. Coli Bacteria *2	51040	548 cfu	2507 cfu	1/Day	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY				
TESTING	30-DAY	48-HR	MEASUREMENT	
(48-Hour Static Renewal)	AVG	MINIMUM	FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	Once/5 Years *3	Grab

## Footnotes:

<sup>\*1 &</sup>quot;Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

<sup>\*2</sup> Colony forming units (cfu) per 100 ml.

<sup>\*3</sup> Test should be taken when the first discharge occurs.

- 4. Outfalls Associated with Reclamation Areas
- (1) This subpart applies to drainage at western alkaline coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas where the discharge, before any treatment, meets all the following requirements:
- (a) pH is equal to or greater than 6.0;
- (b) Dissolved iron concentration is less than 10 mg/L; and
- (c) Net alkalinity is greater than zero.
- (i) The term *brushing and grubbing area* means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil that is being salvaged.
- (ii) The term *regraded area* means the surface area of a coal mine that has been returned to required contour.
- (iii) The term *sediment* means undissolved organic and inorganic material transported or deposited by water.
- (vi) The term *sediment yield* means the sum of the soil losses from a surface minus deposition in macro-topographic depressions, at the toe of the hillslope, along field boundaries, or in terraces and channels sculpted into the hillslope.
- (v) The term *topsoil stockpiling area* means the area outside the mined-out area where topsoil is temporarily stored for use in reclamation, including containment berms.
- (vi) The term *western coal mining operation* means a surface or underground coal mining operation located in the interior western United States, west of the 100th meridian west longitude, in an arid or semiarid environment with an average annual precipitation of 26.0 inches or less.
- (2) At least 6 months prior to entering into the reclamation process, the operator must submit a site specific Sediment Control Plan (Plan) to the permitting authority that is designed to prevent an increase in the average annual sediment yield from pre-mined, undisturbed conditions. The Sediment Control Plan must identify best management practices (BMPs) and also must describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices. The Sediment Control Plan must be approved by the permitting authority and be incorporated into the permit as an effluent limitation. If the Plan is approved by the SMCRA agency, the Plan is considered to meet EPA's approval process, unless EPA disproves the Plan within 90 days upon the reception of the Plan.
- (3) Using watershed models, the operator must demonstrate that implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from premined, undisturbed conditions. The operator must use the same watershed model that was, or will be, used to acquire the SMCRA permit.

- (4) The operator must submit an annual Sediment Control Report every 12 months from the approval of the Sediment Control Plan. This report shall demonstrate that the facility has met requirements set forth in above sub-sections (2) and (3).
- (5) The permittee shall also send a copy of the approved Plan and annual reports to the State of New Mexico Environment Department.

## FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the points of discharge from the associate sediment ponds prior to the receiving stream.

# **TOXICS**

No discharge shall contain any substance, including but not limited to selenium, DDT, PCB's and dioxin, at a level which, when added to background concentration, can lead to bioaccumulation to toxic levels in any animal species

# B. SAMPLE AND TEST REQUIREMENTS

The permittee shall monitor all pollutants listed below at each outfall once per calendar year when a discharge occurs.

POLLUTANTS	CAS No.	STORET				
Radioactivity, Nutrients, and Chlorine						
Aluminum, dissolved	7429-90-5	01106				
Boron, dissolved	7440-42-8	01022				
Cobalt, dissolved	7440-48-4	01037				
Vanadium, dissolved	7440-62-2	01087				
Ra-226 and Ra-228 (pCi/l)		11503				
Tritium (pCi/l)		04124				
Gross Alpha (pCi/l)		80029				
Total Residual Chlorine	7782-50-5	50060				
METALS AND CYANIDE						
Antimony, dissolved (P)	7440-36-0	01097				
Arsenic, dissolved (P)	7440-38-2	01000				

Cadmium, dissolved	7440-43-9	01025
Chromium, dissolved	18540-29-9	01034
Copper, dissolved	7440-50-8	01042
Lead, dissolved	7439-92-1	01049
Mercury, total	7439-97-6	71900
Nickel, dissolved (P)	7440-02-0	01065
Selenium, dissolved (P)	7782-49-2	01145
Silver, dissolved	7440-22-4	01077
Thalllium, dissolved (P)	7440-28-0	01059
Zinc, Dis.	7440-66-6	01080
Cyanide, weak acid		
dissociable	57-12-5	00718
DIOXIN		
2,3,7,8-TCDD	1764-01-6	34675
VOLATILE COMPOUNDS		
Tetrachloroethylene	127-18-4	34475
ACID COMPOUNDS		
Pentachlorophenol	87-86-5	39032
BASE/NEUTRAL		
Benzo(a)pyrene	50-32-8	34247
Hexachlorobenzene	118-74-1	39700
PESTICIDES AND PCBS		
Aldrin	309-00-2	39330
Gamma-BHC	58-89-9	39340
Chlordane	57-74-9	39350
4,4'-DDT and derivatives	50-29-3	39300
Dieldrin	60-57-1	39380
Alpha-Endosulfan	959-98-8	34361
Beta-Endosulfan	33213-65-9	34356
Endrin	72-20-8	39390
Heptachlor	76-44-8	39410
Heptachlor Epoixde	1024-57-3	39420
PCBs	1336-36-3	39516
Toxaphene	8001-35-2	39400

#### C. DISCHARGE MONITORING REPORTS

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted <u>quarterly</u>. Each quarterly submittal shall include separate forms for each month of the reporting period.

Reporting periods shall end on the last day of the months March, June, September, and December.

The permittee is required to submit regular quarterly reports as described above postmarked no later than the  $28^{th}$  day of the month following each reporting period.

## D. DOCUMENTS AND APPLICATION FOR RENEWAL

A copy of documents and reports required in the permit and application for permit renewal shall be sent to New Mexico Environment Department (NMED) at the mailing address listed in Part III.D.4 of this permit.